

EPO - DG 1

27.05.2005

(79)

TS 5586 PCT

C L A I M S

1. Process to prepare a base oil having an paraffin content of between 75 and 95 wt% by subjecting a mixture of a hydroisomerised Fischer-Tropsch wax and a petroleum derived feed to a catalytic pour point reducing treatment, wherein the petroleum derived feed has an aromatic content of between 0 and 20 wt% and a naphthenic compound content of between 15 and 90 wt% and wherein the fraction of petroleum derived feed in the mixture is higher than 5 wt% and lower than 50 wt%.
- 5 2. Process according to claim 1, wherein the petroleum derived feed is a bottoms fraction of a fuels hydrocracker.
- 10 3. Process according to claim 2, wherein the content of sulphur in the mixed feed to the pour point reducing treatment is below 50 ppm and the content of nitrogen in the mixed feed to the pour point reducing treatment is below 10 ppm.
- 15 4. Process according to any one of claims 1-3, wherein the wax content in the petroleum derived feed is below 30 wt%.
- 20 5. Process according to claim 4, wherein the pour point of the petroleum derived feed is below -10 °C.
6. Process according to any one of claims 1-5, wherein the petroleum derived feed has a saturates content of greater than 98 wt% a viscosity index of between 80 and 150 and a sulphur content of below 0.001 wt%.
- 25 7. Process according to claim 6, wherein the petroleum derived feed has been obtained in a process involving a

hydrofinishing step performed at a hydrogen pressure of greater than 100 bars.

5. Process according to any one of claims 1-7, wherein the base oil is hydrogenated after performing the pour point reducing treatment such that the content of aromatics is below 1 wt%.

10. Process according to any one of claims 1-8, wherein the catalytic pour point reducing treatment is a catalytic dewaxing process performed in the presence of a catalyst comprising a Group VIII metal and an intermediate pore size zeolite having pore diameter between 0.35 and 0.8 nm, and a binder.

15. Process according to any one of claims 1-9, wherein after performing the catalytic pour point reducing treatment hydrogen is separated from the dewaxed effluent, contacted with a heterogeneous adsorbent selective for removing hydrogen sulphide and recycled to said catalytic pour point reducing treatment.

20. Process according to claim 10, wherein the heterogeneous adsorbent is zinc oxide.

25. Process according to any one of claims 1-11, wherein the hydroisomerised Fischer-Tropsch wax is obtained by means of the following steps:

(a) hydrocracking/hydroisomerising a Fischer-Tropsch product,

(b) separating by means of distillation the product of step (a) into one or more gas oil fractions and a higher boiling Fischer-Tropsch derived feed.

30. Process according to claim 12, wherein the Fischer-Tropsch product used as feed in step (a) is a product wherein the weight ratio of compounds having at least 60 or more carbon atoms and compounds having at least 30 carbon atoms in the Fischer-Tropsch product is at

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EP0451248

least 0.4 and wherein at least 30 wt% of compounds in the Fischer-Tropsch product have at least 30 carbon atoms.

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AMENDED SHEET



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Europäisches  
Patentamt

Generaldirektion 1

European  
Patent Office

Directorate General 1

Office européen  
des brevets

Direction générale 1



WIPO  
The International Bureau  
34, Chemin des Colombettes  
CH-1211 GENEVA 20  
SWITZERLAND

EPO Customer Services

Tel.: +31 (0)70 340 45 00

Date

20-02-2006

Reference TS 5586 EPC P	Application No./Patent No. 04766080.8 - 2104 PCT/EP2004051248 / ISA EP
Applicant/Proprietor SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V.	

For the aforementioned international application, you are hereby kindly requested to forward to the EPO in its capacity as designated / elected Office:

- a) The publication of the international search report (Art. 20 PCT).
- b) the copy of the international preliminary examination report (Art. 36(3)(a) PCT).
- c) the copy (copies) of the priority document(s). If any document is not available and ISA is not the EP, please indicate below whether the receiving Office has been requested to transmit the document to the International Bureau (Form PCT/RO/101, Box VI; R. 17.1(b) PCT).
- .....

Receiving Section

Engels, Ulrike

Answer of the International Bureau [IB]:

- The requested item [a), b) or c)] is not available with the IB.

Reason: .....

For priority documents [c)] with ISA not EP:

- The applicant has requested the receiving Office to issue a priority document [c)] pursuant to Rule 17.1(b) PCT, but the IB did not receive it.

The International Bureau



To the European Patent Office  
**Entry into the European phase (EPO as designated or elected Office)**

European application number	EP04766080.8
PCT application number	PCT/EP2004/051248
PCT publication number	WO05000999
Applicant's or representative's reference	TS 5586 EPC P

**1. Applicant**

Particulars of the applicant(s) are contained in the international publication or were recorded by the International Bureau subsequent to the international publication.

Changes which have not yet been recorded by the International Bureau are set out here:

Address for correspondence

Shell Internationale Research Maatschappij  
B.V.  
P.O. Box 302  
NL-2501 CH The Hague  
Netherlands

**2. Representative 1**

This is the representative who will be listed in the Register of European Patents and to whom notifications will be made

Name

Address of place of business

Telephone

Fax

e-mail

Any additional representative(s) is/are listed here:

**3. Authorisation**

An individual authorisation is attached.

A general authorisation has been registered under No.:

A general authorisation has been filed, but not yet registered.

The authorisation filed with the EPO as PCT receiving Office expressly includes the European phase.

**4. Request for examination**

Examination of the application under Art. 94 EPC is hereby requested. The examination fee is being (has been, will be) paid.

Request for examination in an admissible non-EPO language:

Verzoekt wordt om onderzoek van de aanvraag als bedoeld in Art. 94.

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**5. Copies**

One or more additional sets of copies of the documents cited in the supplementary European search report are hereby requested.

Number of additional sets of copies

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**6. Documents intended for proceedings before the EPO**

6.1 Proceedings before the EPO as designated Office (PCT I) are to be based on the following documents:

the application documents published by the International Bureau (with all claims, description and drawings), where applicable with amended claims under Art. 19 PCT

unless replaced by the amendments attached.

*Where necessary, clarifications should be attached as 'Other Documents'*

6.2 Proceedings before the EPO as elected Office (PCT II) are to be based on the following documents:

the documents on which the international preliminary examination report is based, including any annexes

unless replaced by the amendments attached.

*Where necessary, clarifications should be attached as 'Other Documents'*

If the EPO as International Preliminary Examining Authority has been supplied with test reports, these may be used as the basis of proceedings before the EPO.

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**7. Translations**

Translations in one of the official languages of the EPO (English, French, German) are attached as crossed below:

\* *In proceedings before the EPO as designated or elected Office (PCT I + II):*

Translation of the International application (description, claims, any text in the drawings) as originally filed, of the abstract as published and of any indication under Rule 13bis.3 and 13bis.4 PCT regarding biological material

Translation of priority application(s)

It is hereby declared that the International application as originally filed is a complete translation of the previous application (Rule 38(5) EPC)

\* *In addition, in proceedings before the EPO as designated Office (PCT I):*

Translation of amended claims and any statement under Art. 19 PCT, if the claims as amended are to form the basis for the proceedings before the EPO (see Section 6).

\* *In addition, in proceedings before the EPO as elected office (PCT II):*

Translation of annexes to the International preliminary examination report

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**8. Biological material**

The invention relates to and/or uses biological material deposited under Rule 28 EPC.

The particulars referred to in Rule 28(1)(c) EPC (if not yet known, the depositary institution and the identification reference(s) [number, symbols, etc.] of the depositor) are given in the International publication or in the translation submitted under Section 7 on:

page(s) / line(s)

A copy of the receipt(s) of deposit issued by the depositary institution

is attached

will be filed at a later date

A waiver of the right to an undertaking from the requester pursuant to Rule 28(3) EPC is attached.

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**9. Nucleotide and amino acid sequences**

The items required under Rules 5.2 and 13ter PCT and Rule 111(3) EPC have already been furnished to the EPO.

The sequence listing as part of the description is attached in PDF format.

The sequence listing does not include matter that goes beyond the content of the application as filed.

In addition, the sequence listing data is attached in computer-readable form in accordance with WIPO Standard 25.

The sequence listing data in computer-readable form in accordance with WIPO Standard 25 is identical to the sequence listing in PDF format.

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**10. Designation fees**

10.1 It is currently intended to pay seven times the amount of the designation fee. The designation fees for all the EPC contracting states designated in the International application are thereby deemed to have been paid (Art. 2 No. 3 RFees).

AT BE BG CH&LI CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LT LU LV MC NL PL PT RO SE SI SK TR

10.2 The declaration in No. 10.1 does not apply. Instead, it is currently intended to pay fewer than seven designation fees for the following EPC contracting states designated in the International application:

It is requested that no communications under Rule 108(3) EPC be issued in respect of any contracting states not indicated.

10.3 If an automatic debit order has been issued (Section 12), the EPO is authorised, on expiry of the basic period under Rule 107(1)(d) EPC, to debit seven times the amount of the designation fee. If states are indicated in No. 10.2, the EPO will debit designation fees for those states only, unless instructed otherwise before the basic period expires.

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**11. Extension of the European patent**

This application is also considered as being a request for extension to all the non-contracting states to the EPC designated in the international application with which "extension agreements" were in force on the date of filing the international application. However, the extension only takes effect if the prescribed extension fee is paid.



It is currently intended to pay the extension fee for the following states:

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**12. Debit from deposit account**

Currency

EUR

The European Patent Office is hereby authorised to debit from the following deposit account any fees and costs indicated on the fees page.

Deposit account number  
Account holder

28090005

Shell International B.V.

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**13. Reimbursements (if any) should be made to the following EPO deposit account:**

Number and account holder

28090005, Shell International B.V.

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**14. Fees**

		Factor applied	Fee schedule	Amount to be paid
14-1	005 Designation fee	7	75.00	525.00
14-2	006 Examination fee	1 (40%)	1 430.00	572.00
14-3	015 Claims fee	3	40.00	120.00
14-4	020 Basic national fee for an International application	1	90.00	90.00
	<b>Total:</b>		<b>EUR</b>	<b>1 307.00</b>

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**15. Annotations**

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**16. Signature(s) of applicant(s) or representative**

Place:

Date: 16 January 2006

Signed by: Subject: NL, Shell International BV, A. Zeestraaten 1825  
Issuer: , European Patent Office, European Patent Office CA

Capacity: ( Representative )

For employees (Art. 133(3) EPC) having a general authorisation:

General authorisation No.

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Europäisches  
Patentamt

European  
Patent Office

Office européen  
des brevets

### Acknowledgement of receipt

We hereby acknowledge receipt of the form for entry into the European phase (EPO as designated or elected Office) as follows:

Submission number	89504		
PCT application number	PCT/EP2004/051248		
Date of receipt	16 January 2006		
Your reference	TS 5586 EPC P		
Applicant			
Country			
Documents submitted	EPF1200.PDF ep-euro-pct.xml		application-body.xml package-data.xml
Submitted by	CN=A. Zeestraaten 1825,O=Shell International BV,C=NL		
Method of submission	Online		
Date and time receipt generated	16 January 2006, 14:54:01		
Digest	86:D0:D3:BA:15:5F:AF:38:01:FA:32:C1:DE:60:1D:F0:34:8 3:5F:9E		

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Generaldirektion 1

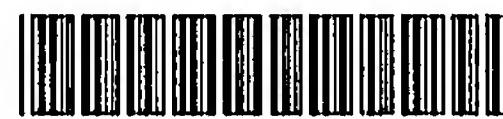
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Date

11.11.05

Reference	Application No./Patent No. 04766080.8 - 2104 PCT/EP2004051248
Applicant/Proprietor SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V.	

#### Entry Into the European phase before the European Patent Office

These notes describe the procedural steps required for entry into the European phase before the European Patent Office (EPO). You are advised to read them carefully: failure to take the necessary action in time can lead to your application being deemed withdrawn.

1. The above-mentioned international patent application has been given European application No. 04766080.8.
2. Applicants without a residence or their principal place of business in an EPC contracting state may themselves initiate European processing of their international applications, provided they do so before expiry of the 31st month from the priority date (see also point 6 below).

During the European phase before the EPO as designated or elected Office, however, such applicants must be represented by a professional representative (Arts. 133(2) and 134(1), (7) EPC).

Procedural acts performed after expiry of the 31st month by a professional representative who acted during the international phase but is not authorised to act before the EPO have no legal effect and therefore lead to loss of rights.

Please note that a professional representative authorised to act before the EPO and who acted for the applicant during the international phase does not automatically become the representative for the European phase. Applicants are therefore strongly advised to appoint in good time any representative they wish to initiate the European phase for them; otherwise, the EPO has to send all communications direct to the applicant.

3. Applicants with a residence or their principal place of business in an EPC contracting state are not obliged to appoint, for the European phase before the EPO as designated or elected Office, a professional representative authorised to act before the EPO.  
However, in view of the complexity of the procedure it is recommended that they do so.
4. Applicants and professional representatives are also strongly advised to initiate the European phase using EPO Form 1200 (available free of charge from the EPO). This however is not compulsory.



**5. To enter the European phase before the EPO, the following acts must be performed.**  
(N.B.: Failure validly to do so will entail loss of rights or other adverse legal consequences.)

5.1 If the EPO is acting as designated or elected Office (Arts. 22(1)(3) and 39(1) PCT respectively), applicants must, within 31 months from the date of filing or (where applicable) the earliest priority date:

- a) Supply a translation of the international application into an EPO official language, if the International Bureau did not publish the application in such a language (Art. 22(1) PCT and Rule 107(1)(a) EPC).  
**If the translation is not filed in time, the International application is deemed withdrawn before the EPO (Rule 108(1) EPC).**  
This loss of rights is deemed not to have occurred if the translation is then filed within a two-month grace period as from notification of an EPO communication, provided a surcharge is paid at the same time (Rule 108(3) EPC).
- b) Pay the national basic fee (EUR 160,00) and, where a supplementary European search report has to be drawn up, the search fee (EUR 960,00 ; Rule 107(1)(c) and (e) EPC).
- c) If the time limit under Article 79(2) EPC expires before the 31-month time limit, pay the designation fee (EUR 75,00) for each contracting state designated (Rule 107(1)(d) EPC).
- d) If the time limit under Article 94(2) EPC expires before the 31-month time limit, file the written request for examination and pay the examination fee (EUR 1430,00 ; Rule 107(1)(f) EPC).
- e) Pay the third-year renewal fee (EUR 380,00) if it falls due before expiry of the 31-month time limit (Rule 107(1)(g) EPC).

If the fees under (b) to (d) above are not paid in time, or the written request for examination is not filed in time, the international application is deemed withdrawn before the EPO, or the contracting-state designation(s) in question is (are) deemed withdrawn (Rule 108(1) and (2) EPC). However, the fees may still be validly paid within a two-month grace period as from notification of an EPO communication, provided the necessary surcharges are paid at the same time (Rule 108(3) EPC). For the renewal fee under (e) above, the grace period is six months from the fee's due date (Article 86(2) EPC).

5.2 If the application documents on which the European grant procedure is to be based comprise more than ten claims, a claims fee is payable within the 31-month time limit under Rule 107(1) EPC for the eleventh and each subsequent claim (Rule 110(1) EPC). The fee can however still be paid within a one-month grace period as from notification of an EPO communication pointing out the failure to pay (Rule 110(2) EPC).

6. If the applicant had a representative during the application's international phase, the present notes will be sent to the representative, asking him to inform the applicant accordingly.

**All subsequent communications will be sent to the applicant, or - If the EPO is informed of his appointment in time - to the applicant's European representative.**



7. For more details about time limits and procedural acts before the EPO as designated and elected Office, see the EPO brochure

How to get a European patent  
Guide for applicants - Part 2  
PCT procedure before the EPO - "Euro-PCT"

This brochure, the list of professional representatives before the EPO, Form 1200 and details of the latest fees are now all available on the Internet under

<http://www.european-patent-office.org>

#### RECEIVING SECTION

